

Fujitsu recommends Windows 8 Pro.

# Data Sheet

## Fujitsu ESPRIMO P710 E90+ Desktop PC

### The Expandable Business Workhorse

Fujitsu ESPRIMO P710 PCs bring you highly expandable technology for your challenging business applications. The use of identical components within the product family ensures perfect infrastructure compatibility and simplifies rollout. A 92%-efficient power supply will ensure environmental compliance for years to come. Intel® Standard Manageability Technology keeps administration costs to a minimum. Plus, EraseDisk ensures secure system retirement

#### Microtower

Maximum performance and optimal extendability

- High-quality, high-value microtower, 7 drive bays, 4 PCI/PCI express interfaces

#### Energy efficiency

Reduce power consumption and costs - without any loss of performance

- Sophisticated technology, switched monitor outlet, low energy-consuming processors and enhanced power management settings

#### Green technology

Fujitsu's contribution to environmental protection for the continued existence of our planet

- Halogen-free printed circuit of mainboard and power supply, sophisticated product concept for the entire lifecycle

#### Quiet

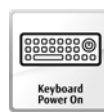
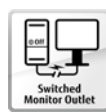
Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized cooling concept ensures silent operations

#### Serviceability

Easy to extend and optimal user-friendliness without any additional tools

- Easy access to all replaceable and expandable components



# Components

<b>Processor</b>	Intel® Core™ i7-3770 processor (4 Cores / 8 Threads, 3.40 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics 4000) *
	Intel® Core™ i5-3570 processor (4 Cores / 4 Threads, 3.40 GHz, up to 3.8 GHz, 6 MB, Intel® HD Graphics 2500) *
	Intel® Core™ i5-3470 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 6 MB, Intel® HD Graphics 2500) *
	Intel® Core™ i3-3220 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2500)
	Intel® Core™ i3-2130 processor (2 Cores / 4 Threads, 3.40 GHz, 3 MB, Intel® HD Graphics 2000)
	Intel® Core™ i3-2120 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2000)
	Intel® Pentium® processor G870 (2 Cores / 2 Threads, 3.10 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G860 (2 Cores / 2 Threads, 3.00 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G850 (2 Cores / 2 Threads, 2.90 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G645 (2 Cores / 2 Threads, 2.90 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G640 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics)
	Intel® Celeron® processor G550 (2 Cores / 2 Threads, 2.60 GHz, 2 MB, Intel® HD Graphics)
	Intel® Celeron® processor G540 (2 Cores / 2 Threads, 2.50 GHz, 2 MB, Intel® HD Graphics)
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)
<b>Operating systems</b>	
<b>Operating system</b>	Windows 8 Pro
	Windows 8
	Windows® 7 Professional 64-bit
	Windows® 7 Professional 32-bit
	Windows® 7 Home Premium 64-bit
	Windows® 7 Home Basic (EM) 32-bit
<b>Operating system compatible</b>	
openSUSE Linux	
Windows® XP	
<b>Operating system notes</b>	
Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via <a href="http://support.ts.fujitsu.com">http://support.ts.fujitsu.com</a>	
<b>Memory modules</b>	
2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM	
4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM	
8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM	
<b>Hard disk drives (internal)</b>	
SSD SATA III, 256 GB, 2.5-inch	
SSD SATA III, 128 GB, 2.5-inch, SED	
SSD SATA III, 128 GB, 2.5-inch	
SSD SATA II, 128 GB, 2.5-inch, FDE	
HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch	
HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch	
HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical	
HDD SATA III, 7200 rpm, 500 GB, 3.5-inch	
HDD SATA III, 7200 rpm, 250 GB, 3.5-inch	
HDD SATA II, 7200 rpm, 320 GB, 2.5-inch	
HDD SATA II, 7200 rpm, 160 GB, 2.5-inch	
<b>Hard disk notes</b>	
Up to 18 GB of HDD space is reserved for system recovery	
<b>Graphics add on cards (optional)</b>	
NVIDIA® Quadro® NVS 300, 512 MB	
NVIDIA® GeForce® GT630 DisplayPort 2GB FH 0-Watt, 2 GB	
NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB	
LFH59/ 2x DVI-I adapter cable	
DP to DVI-D (single link) Adapter Cable	
ATI Radeon® HD7350 1GB FH, 1 GB	
2nd NVIDIA® Quadro® NVS 300, 512 MB	

<b>Drives (optional)</b>	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 24in1 USB 2.0 3.5"
<b>Interface add on cards/components (optional)</b>	
	WLAN III, 802.11g/Draft-n (Windows only, dedicated regions only)
	Parallel Interface
	Gigabit Ethernet PCIe x1, DS
	eSATA Interface
	Dual serial card PCIe x1, powered
	Dual serial card PCIe x1
<b>Base unit</b>	ESPRIMO P710 E90+
<b>Mainboard</b>	
<b>Mainboard type</b>	D3161
<b>Formfactor</b>	µATX
<b>Chipset</b>	Intel® Q75
<b>Processor socket</b>	LGA 1155
<b>Processor quantity maximum</b>	1
<b>Memory slots</b>	4 DIMM (DDR3)
<b>Supported capacity RAM (max.)</b>	32 GB
<b>Memory frequency</b>	1600 MHz
<b>Memory notes</b>	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
<b>LAN</b>	10/100/1000 MBit/s Intel® 82579 V
<b>BIOS version</b>	AMI Aptio 4.6
<b>BIOS features</b>	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
<b>Audio codec</b>	Conexant CX20642
<b>Audio features</b>	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
<b>I/O controller on board</b>	
<b>Serial ATA total</b>	5
<b>thereof SATA III</b>	1
<b>thereof eSATA</b>	2 (optional)
<b>Controller functions</b>	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI
<b>Interfaces</b>	
<b>Audio: line-in</b>	1
<b>Audio: line-in / microphone</b>	1
<b>Audio: line-out</b>	1
<b>Front audio: microphone</b>	1
<b>Front audio: headphone</b>	1
<b>USB 2.0 total</b>	10
<b>USB 3.0 total</b>	4
<b>USB front</b>	4x 2.0 or 2x 2.0/ 2x 3.0
<b>USB rear</b>	6x 2.0 / 2x 3.0
<b>USB internal</b>	2
<b>VGA</b>	1 (via DVI to VGA adapter, part of shipment)

**Interfaces**

DisplayPort	1
DVI	1 (DVI-I)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
eSATA	1 (optional)
Interface Module notes	Anytime USB charge functionality

**Input device / components**

	Optical USB wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse KBPC PX ECO Mouse M440 ECO

**Drive bays**

Drive bays total	7
2.5-inch internal bays	1
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2

**Slots**

PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm / 12.29 inch) Full height
PCI-Express x1	1 x (312 mm / 12.29 inch) Full height
PCI (32-bit / 33 MHz)	1 x (170 mm / 6.7 inch) Full height

**Graphics on board**

Graphics brand name	Intel® HD Graphics, HD Graphics 2000, HD Graphics 2500, HD Graphics 4000 (depending on CPU)
Shared video memory	up to 1759 MB
TFT resolution (VGA)	1024 x 768 pixel 1280 x 1024 pixel 1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1600 x 1200 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DisplayPort)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel

**Graphics on board**

<b>Graphics features</b>	Dual display support DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.3 (depending on CPU) Open CL™ 1.1 (depending on CPU) For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows 7® only)
<b>Graphics notes</b>	Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

**Electrical values**

<b>Power efficiency note</b>	power supply efficiency (at 230V; 20% / 50% / 100% load) : 88% / 92% / 91%
<b>Rated voltage range</b>	100 V - 240 V
<b>Rated frequency range</b>	50 Hz - 60 Hz
<b>Operating voltage range</b>	90 V - 264 V
<b>Operating line frequency range</b>	47 Hz - 63 Hz
<b>Max. output of single power supply</b>	280 W
<b>Power factor correction/active power</b>	active
<b>Monitor outlet</b>	Switched

**Power consumption**

<b>Power consumption note</b>	See white paper Energy Consumption
<b>Link to Energy White Paper</b>	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=0e3c33e1-feaa-459c-a56a-8b1167a85e4d">http://docs.ts.fujitsu.com/dl.aspx?id=0e3c33e1-feaa-459c-a56a-8b1167a85e4d</a>

**Heat dissipation**

<b>Heat dissipation notes</b>	See white paper Energy Consumption
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**Noise emission**

<b>Standard noise emission</b>	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
<b>Standard noise notes / description</b>	A weighted sound power level L <sub>wad</sub> (in B) / Workplace related A-weighted sound pressure level L <sub>pAm</sub> (in dB(A))
<b>Standard noise operation mode: CPU 50% load</b>	3.6 B / 23 dB(A) Bystander; 27 dB(A) Operator position
<b>Standard noise operation mode: HDD load</b>	3.6 B / 23 dB(A) Bystander; 25 dB(A) Operator position
<b>Standard noise operation mode: Idle mode</b>	3.4 B / 20 dB(A) Bystander; 23 dB(A) Operator position
<b>Standard noise operation mode: ODD load</b>	4.6 B / 32 dB(A) Bystander; 37 dB(A) Operator position
<b>Standard noise operation mode: Office applications 2.0</b>	3.4 B / 20 dB(A) Bystander; 23 dB(A) Operator position
<b>Blue angel noise emission according certification</b>	According to ISO 7779:2010, ECMA-74 for max. possible configuration
<b>Blue angel noise notes / description</b>	A weighted sound power level L <sub>wad</sub> (in B); 1B = 10dB
<b>Blue angel noise operation mode: HDD load</b>	3.6 B = 36 dB
<b>Blue angel noise operation mode: Idle mode</b>	3.6 B = 36 dB
<b>Blue angel noise operation mode: ODD load</b>	4.7 B = 47 dB

**Dimensions / Weight / Environmental**

<b>Dimensions (W x D x H)</b>	175 x 419 x 395 mm 6.89 x 16.5 x 15.56 inch
<b>Operating position</b>	Vertical
<b>Weight</b>	11 kg
<b>Weight (lbs)</b>	24.25 lbs

**Dimensions / Weight / Environmental**

<b>Weight notes</b>	Actual weight may vary depending on configuration
<b>Operating ambient temperature</b>	10 - 35°C (50 - 95°F)

**Compliance**

<b>Product</b>	ESPRIMO P710
<b>Model</b>	M15W
<b>Germany</b>	TÜV GS
<b>Europe</b>	CE Nordic Swan in progress
<b>USA/Canada</b>	FCC Class B cCSAus
<b>Global</b>	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 (dedicated regions) EPEAT® Gold (dedicated regions)
<b>Compliance link</b>	<a href="https://sp.ts.fujitsu.com/sites/certificates/">https://sp.ts.fujitsu.com/sites/certificates/</a>

**Additional Software**

<b>Additional software (preinstalled)</b>	Nero Essentials S (burning software) Fujitsu Recovery (Hard Disk Based Recovery) Norton Internet Security (incl. Firewall) 60 days version Don't forget Office.
<b>Additional software (optional)</b>	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 10 Essentials XL

**Miscellaneous**

Keyboard on (Special Fujitsu keyboard required)  
Thermal management  
Extended lifetime

**Compatibility (references)**

DMI 2.0  
PC 2001  
WMI 1.5  
USB 2.0  
SMBIOS

**Manageability**

<b>Manageability technology</b>	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) Intel® Standard Manageability WoL (Wake on LAN)
<b>Manageability software</b>	DeskView Client DeskView Instant BIOS Management DeskView Integration for Symantec Management Platform
<b>DeskView components</b>	Inventory Management BIOS Management Driver Management Security Management Alarm Management
<b>Manageability link</b>	<a href="http://ts.fujitsu.com/manageability">http://ts.fujitsu.com/manageability</a>

<b>Security</b>	
System protection	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock
Audit proof protection	EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
Access protection	User and supervisor BIOS password Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader
<b>Serviceability</b>	
	EasyFix EasyChange for HDD EasyChange for optical drives
<b>Packaging information</b>	
Packaging dimension (mm)	516 x 278 x 562 mm
Packaging dimension (inch)	20.31 x 10.94 x 22.13 inch
Max. quantity / pallet	28
Material - Weight (g) Carton	1405 g
Material - Weight (lbs) Carton	3.1 lbs
Material - Weight (g) EPS / PS	160 g
Material - Weight (lbs) EPS / PS	0.35 lbs
Material - Weight (g) PE	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	printed user documentation is bleached in chlorine free process
<b>Warranty</b>	
Standard Warranty	1 year
Service level	Bring-In / On-Site Service (depending on country)
<b>Maintenance and Support Services - the perfect extension</b>	
Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	<a href="http://www.fujitsu.com/fts/services/support/index.html">http://www.fujitsu.com/fts/services/support/index.html</a>

## Recommended Accessories

### Wireless Keyboard Set LX900



The Wireless Keyboard LX900 is a top of the line desktop solution for lifestyle orientated customers, who want only the best for their desk. This superb keyboard set with offers ambitious users more functions, security and better features than a conventional interface device. It even includes 2.4 GHz technology and 128 AES encryption for security.




S26381-K564-L4\*\* (\*\*: Country specific variation)

### SOUNDSYSTEM DS E2000 Air



The new more powerful SOUNDSYSTEM DS E2000 Air gives you impressive, well-balanced sound throughout the frequency band. It is an unbeatable USB speaker set with a surprisingly small form factor. The robust satellite speakers are decorated with a deluxe piano finish and the base is adorned with warm ambient lighting.

Order Code:  
S26391-F7128-L600

<b>WebCam 130 HD2</b>		With the most advanced HD (High Definition / 720p) recording feature and widescreen video format (16:9 and 16:10), WebCam 130 HD2 can capture up to 30 frame rate per second, close up to HD/720p quality video. Even more: 1-Click-Upload makes the video uploading to YouTube in a snap! With smart clip for notebook & LCD display it is easy to install on any device you want.	Order Code: S26391-F7136-L5
<b>HS E2000 Communicator Headset</b>		The Fujitsu HS E2000 Communicator headset allows you to use your personal computer for Voice over IP (VoIP) in stereo audio quality. This premium headset is designed to provide superb audio quality and comfort for the telephony, internet chat, speech recognition, video conferencing and multimedia applications.	Order Code: S26391-F7139-L5
<b>CELVIN® Drive D100</b>		The CELVIN® Drive D100 is a highly reliable external storage device with a standard USB-interface for easy Plug & Play use with a notebook or PC. It is also easy to set up additional home network capacity by connecting it with dedicated routers or NAS devices.	Order Code: S26341-F103-L118



# More information

## Fujitsu OPTIMIZATION Services

In addition to Fujitsu ESPRIMO P710 E90+, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

### Computing Products

[www.fujitsu.com/global/services/computing/](http://www.fujitsu.com/global/services/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about Fujitsu ESPRIMO P710 E90+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts/ESPRIMO](http://www.fujitsu.com/fts/ESPRIMO)

## Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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